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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,380	01/28/2004	Ashwin J. Mathew	03226.443001;SUN030034	4747
32615	7590	11/15/2006	EXAMINER	
OSHA LIANG L.L.P./SUN 1221 MCKINNEY, SUITE 2800 HOUSTON, TX 77010			KIM, PAUL	
			ART UNIT	PAPER NUMBER
			2161	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/767,380

Applicant(s)

MATHEW ET AL.

Examiner

Paul Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 20-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is responsive to the following communication: Election filed on 25 August 2006.
2. Claims 1-19 are pending and present for examination. Claims 20-31 are Non-elected.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claims 10, 11 and 19** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. **As per claims 10, 11 and 19**, the claims recite the following in line 2 of each claim: "[the] transformation language is substantially compliant" with either XSLT or JAVA syntax. The recited language fails to particularly point out and distinctly claim the extent of the compliance needed in order for the transformation language to be compliant with XSLT or JAVA syntax.

#### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:  
  
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
7. **Claim 1** is rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. The invention is inoperative since the generated query is neither transmitted nor executed. Therefore, even though a query directed to a source system is generated, without the transmission or execution of the query, the source system would not be able to provide a reply with respect to the query.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3-10, 12, 14, 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bingham (USPGPUB 2003/0120672, hereinafter referred to as BINGHAM), filed on 20 December 2002, and published on 26 June 2003, in view of Ng et al (NPL Document, "PeerDB: A P2P-based System for Distributed Data Sharing," hereinafter referred to as NG), published in 2003 by the 19<sup>th</sup> International Conference of Data Engineering.

BINGHAM and NG disclose the limitations of claims 1, 3, 5-10, 12, 14 and 16-18 for the reasons stated below.

BINGHAM differs from the claimed invention in that BINGHAM fails to expressly disclose a method wherein a join engine peer accesses a global attribute object model for identifying a dependent output entity and wherein the modified attribute set is then published to an output source system associated with an output entity (claims 1 and 12).

10. **As per independent claims 1 and 12**, BINGHAM, in combination with NG, discloses:

An automated method of updating data within a peer-to-peer enterprise information system comprising:

publishing a data change for a source data type over a broadcast channel of said peer-to-peer enterprise information system {See BINGHAM, [0012], wherein this reads over "[t]o ensure that a hosting node is timely notified of any change to the content objects . . . any change to one of the content objects triggers an event to publish the changed content object"};

in response to said data change a join engine peer accessing a global attribute object model for identifying a dependent output entity {See NG, P636:C1, wherein this reads over "DBAgent provides the environment for mobile agents to operate on. Each PeerDB node has a master agent that manages the query of the user. In particular, it will clone and dispatch worker agents to neighboring nodes, receive answers and present them to the user"}, said output entity comprising a same attribute of said data change {See BINGHAM, [0060], wherein this reads over "the content object is considered as or includes an API object that has different attributes for synchronization associated with it. Only when the other nodes have their shared instance of this content object called upon do they then synchronize the information associated with the object"},

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and for identifying additional attributes for forming a modified attribute set {See BINGHAM, [0059], wherein this reads over "[b]ased upon a pre-defined set of attributes, the synchronization could take place in different mechanisms"; and [0060], wherein this reads over "[o]nly when the other nodes have their shared instance of this content object called upon do they then synchronize the information associated with this object"};

generating a query directed to a source system comprising said additional attributes for forming said modified attribute set {See BINGHAM, [0059], wherein this reads over "[b]ased upon a pre-defined set of attributes, the synchronization could take place in different mechanisms"; and [0060], wherein this reads over "[o]nly when the other nodes have their shared instance of this content object called upon do they then synchronize the information associated with this object"}; and

responsive to a reply from said source system, said join engine peer automatically forming said modified attribute set and publishing said modified attribute set to an output source system associated with said output entity {See NG, P639:C1, wherein this reads over "[i]f the retrieved data need to be further processed before being returned, then the agent will perform the task (with the code that it carries along) and return the summarized data"}.

While NG does not expressly disclose a method wherein a data change is published over a broadcast channel, BINGHAM discloses a method wherein changes to one of the content objects triggers an event to publish the changed content object to other nodes. The disclosures found in both BINGHAM and NG are directed to the sharing of data in a peer-to-peer based environment. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by BINGHAM and NG.

One of ordinary skill in the art would have been motivated to do this modification so that a data may be consolidated and synchronized from various related sources in a peer-to-peer enterprise information system by broadcasting data changes, and having respective join engines generating queries to retrieve attributes to form a modified attributes set.

**11. As per dependent claims 3 and 14, BINGHAM, in combination with NG, discloses:**

A method as described in Claim 1 wherein said published data change includes at least one changed attribute and all other attributes of said source data type {See BINGHAM, [0012], wherein this reads over "[t]o ensure that a hosting node is timely notified of any change to the content objects . . . any change to one of the content objects triggers an event to publish the changed content object to the hosting node and the hosting node is thus always synchronized with its nodes providing the content sources"}.

**12. As per dependent claims 5 and 16, BINGHAM, in combination with NG, discloses:**

A method as described in Claim 1 wherein said global attribute object model maps dependencies between output entity attributes and source entity attributes {See

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BINGHAM, [0060], wherein this reads over "the content object is considered as or includes an API object that has different attributes for synchronization associated with it. Only when the other nodes have their shared instance of this content object called upon do they then synchronize the information associated with the object"}.

13. **As per dependent claim 6**, it would inherent for the method of forming a modified attribute set to comprise performing a data transformation since the creation or modification of the modified attribute set would necessitate in the transformation of data.

14. **As per dependent claim 7**, it would inherent for the method of forming a modified attribute set to further comprise performing a data transformation for the published data change since the insertion of the published data change into the modified attribute set would necessitate in the transformation of data.

15. **As per dependent claim 8**, BINGHAM, in combination with NG, discloses:

A method as described in Claim 7 wherein said performing a data transformation is by said join engine peer {See BINGHAM, [0012], wherein this reads over "[t]o ensure that a hosting node is timely notified of any change to the content objects . . . any change to one of the content objects triggers an event to publish the changed content object to the hosting node and the hosting node is thus always synchronized with its nodes providing the content sources"}.

16. **As per dependent claims 9 and 17**, BINGHAM, in combination with NG, discloses:

A method as described in Claim 8 wherein said performing a data transformation comprises automatically transforming said data change into a transformation script of a transformation language for implementation by said join engine peer {See BINGHAM, [0064], wherein this reads over "the HTML pages can be potentially re-purposed for various devices, such as a PDA, a portable computer, or another language on another personal computer"}.

17. **As per dependent claims 10 and 18**, BINGHAM, in combination with NG, discloses:

A method as described in Claim 9 wherein said transformation language is substantially compliant with XSLT syntax {See BINGHAM, [0063], wherein this reads over "[b]oth the XSLT style sheet and the XML document are included in one or more content objects, wherein the content objects can represent . . . APIs to another application that will provide specific information when called upon"}.

18. **Claims 2, 4, 10-11, 13, 15 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over BINGHAM, in view of NG, as applied to claims 1, 3-10, 12, 14, 16-18 above, and in further view of Official Notice.

19. **As per dependent claims 2 and 13**, it would have been obvious to one of ordinary skill in the art for the broadcast channel to be associated with an adapter peer for a source system for the source

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data type since it would be necessary to utilize the broadcast channel in effectively publishing the data change in the peer-to-peer enterprise information system.

20. **As per dependent claims 4 and 15**, it would have been obvious to one of ordinary skill in the art to form the modified attribute set directly from the published data change when all the additional attributes are contained within the source data type since there would be no need to further access other sources for additional attributes.

21. **As per dependent claims 10, 11 and 19**, it would have been obvious to one of ordinary skill in the art to use transformation language which is compliant with XSLT and JAVA language syntax since both syntaxes would have been widely known within the art at the time the invention was made.

### ***Conclusion***

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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